

What is claimed is:

1. A circuit device manufacturing method comprising the steps of:

5 forming conductive patterns, by preparing a conductive foil and then forming isolation trenches shallower than a thickness of the conductive foil, on the conductive foil in regions except at least the conductive patterns on which a number of mounting portions of circuit elements are formed;

10 covering surfaces of the conductive patterns and the isolation trenches with a resist layer and forming a conductive plating layer in desired regions of the conductive patterns;

fixing circuit elements on the conductive plating layer on respective mounting portions of desired conductive patterns;

15 commonly molding an insulating resin to cover collectively the circuit elements on respective mounting portions and to fill the isolation trenches;

removing the conductive foil having thickness portions in which the isolation trenches are not provided; and

20 separating the insulating resin into respective mounting portions by dicing.

2. The circuit device manufacturing method according to claim 1, further comprising the step of:

25 forming connecting member that connect electrically

electrodes of the circuit elements on respective mounting portions and desired conductive patterns, before the step of commonly molding an insulating resin.

5       3. The circuit device manufacturing method according to claim 1, wherein the conductive foil is formed of any one of copper, aluminum, and iron-nickel.

10      4. The circuit device manufacturing method according to claim 1, wherein the conductive plating layer is formed smaller than the conductive patterns.

15      5. The circuit device manufacturing method according to claim 4, wherein the conductive plating layer is formed by gold or silver plating.

20      6. The circuit device manufacturing method according to claim 1, wherein the isolation trenches formed selectively on the conductive foil are formed by chemical or physical etching.

7. The circuit device manufacturing method according to claim 1, wherein at least one of bare semiconductor chips and chip circuit components are fixed as the circuit elements.

8. The circuit device manufacturing method according to claim 2, wherein the connecting member is formed by wire bonding.

5 9. The circuit device manufacturing method according to claim 8, wherein the wire bonding is applied onto the conductive plating layer of the conductive patterns.

10 10. The circuit device manufacturing method according to claim 8, wherein position recognition of the wire bonding is executed by using contrasts between the conductive patterns and the conductive plating layer.

15 11. The circuit device manufacturing method according to claim 1, wherein the insulating resin is covered by transfer molding.

20 12. The circuit device manufacturing method according to claim 1, wherein a plurality of blocks in which conductive patterns on which at least a number of mounting portions of the circuit elements are formed are aligned in a matrix fashion are arranged on the conductive foil.

25 13. The circuit device manufacturing method according to claim 12, wherein the insulating resin is covered by transfer

molding every block.

14. The circuit device manufacturing method according to claim 12, wherein the insulating resin is separated into 5 respective mounting portions by dicing every molded block.

15. The circuit device manufacturing method according to claim 14, wherein the dicing is carried out by using alignment marks formed together with the conductive patterns.

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16. The circuit device manufacturing method according to claim 14, wherein the dicing is carried out by using opposing alignment marks formed together with the conductive patterns.

KODAK SAFETY FILM